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<151> 1997-06-02
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Gln Thr Gly Leu Leu Lys Ile Lys Thr Glu Pro Leu Asp Phe Asn Asp 125
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Gly Pro Ile Pro Leu His Gln His Glu Arg Tyr Leu Cys Lys Met Asn
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Lys Ala Gly Val Phe Val Asp Asn Lys Ala Leu Leu Ser Ser Val
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Gln His Met Asn His Arg Tyr Ser Tyr Cys Lys Arg Glu Ala Glu Glu
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<212> PRT

<213> *Mus musculus*

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Ile Ser Leu His Ser Ser Pro Ser Pro Gly Gly Gln Thr Glu Thr Gly
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<212> DNA

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ccgcctatgc cgccccatcc tggacattac tggccagttc acaatgagct tgcattccag	180
cctcccatcc ccaatcatcc tgctcctgag tactggtgct ccattgctta ctttgaatg	240
gacgttcagg taggagagac gtttaaggc cttcaagtt gccctgttgt gactgtggat	300
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aggacagaag cgattgagag agcgagggtt cacataggca aaggagtgc gttggaatgt	420
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tactacctgg acagagaagc tggccgagca cctggcgacg ctgttcataa gatctaccac	540
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gccactgcgc aagctgcagc tgctgctcag gcccggccg tggcagggaa catccctggc	660
cctgggtccg tgggtgaaat agccccagcc atcagtctgt ctgctgctgc tggcatcggt	720
gtggatgacc tccggcgatt gtgcattctc agatgagct ttgtgaaggg ctggggccca	780
gactacccca ggcagagcat caaggaaacc ccgtgctgga ttgagattca ctttcaccga	840
gctctgcgc tcttggatga agtcctgcac accatgccc ttgcggaccc acagccttta	900
gactgagatc tcacaccacg gacgcctaa ccattccag gatggtgac taatgaaata	960
<210> 7	
<211> 476	
<212> DNA	
<213> Mus musculus	
<220>	
<221> misc_feature	
<222> (262)..(476)	
<223> n can be any nucleotide	
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caaagtccacc gccaagtgtat caaggatggc aaacacaggg cttataacca aaaggtataaa	180
aaaagtctgc agtcttgccc taagataca aaactgaatt ttaaacaatg tcaaaacata	240

catgattta acaagtatat gaaaaagaat cacacatcaa atcaagtaca aaaatatcca 300
aaccacctgt tacaactgca ctgttccat tatcctgcac agtatttaac ataaaaattt 360
agcagttcc aaaaatattc attaattcac ttgaagttac tgcccncntgc aaaacagtga 420
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<210> 8

<211> 850

<212> DNA

<213> *Mus musculus*

<400> 8
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actgcccccc tccgggcccc tgccccgaac tccagccccca gcgcctgtta ctgcccaga 120
tacagcaaga tgcgcggtcc tggcagcgag acacgggcga gcactgtccc ccggtccccg 180
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catcatctgc aacaagattc ctggcctggc cccacggcag cgtccatct gccagagccg 480
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ggagaagcaa ggctactaca accaggcgga aggctggaag tggggggct gctcagcgga 780
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cgccggatcc 850

<210> 9

<211> 475

<212> DNA

<213> *Mus musculus*

<220>

<221> misc_feature

<222> (446)..(446)

<223> n can be any nucleotide

<400> 9

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attagaagta aatataatttgc atgaaggaaa tcttgaaaaaa atactgacta gataaaaatt 180
gtaagccaag ctttctgact gaaaaatgct acctagccac agatcattgc tgatgttgg 240
ttcattgcat gagtgtgtat gtgtgttat atatgtatac acatataatgtgtgtgt 300
gtgtatgtgt acacacacat atatgtgggt tttgggggtt atggataaga tgggtctatg 360
aaaataattt gtctcttgc ttaattaatg aagcttctgt catgccaagt aatctttaag 420
ggagaatcag aacttttcat taaaantcat aaggaaaca gaatttgcgg 475

<210> 10

<211> 1537

<212> DNA

<213> *Mus musculus*

<400> 10

agcggaggtt cagtctgcgg acacgcgtgg agcccttgcc cgggcctccg tgggtctgag 60
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tctgaaccaa gaacaaaaaa atgtttcagc ttctgtcatt tcaaagaagg cattaaactag 180
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aatgctcacc aatgattttt taaaaagaa caagttccc tcaaaactgc agaaaactga 1440
aaatcaaata ggtgtatcac agtattgccg gtcctcatca catttgcattt gtgaagagaa 1500
tgaagttagaa attaaaagta gaaccagagg atcccaa 1537

<210> 11

<211> 477

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (261)..(448)

<223> n can be any nucleotide

<400> 11
gagtaaactc tccttccgag cgcggcgct ggacgccc aaaccgctgc ccatctaccg 60
cgccaaggac atgcctgatc tcaacgactg cgtctccatc aaccggccg tgccccagat 120
gccccaccggg atggagaagg aggaggaatc ggaacatcac ctacagcgag ctatttcagc 180
gcagcaagta tttagagaaa aaaaagagag catggtcatt ccagttcctg aggagagag 240
caacgtcaac tattacaatc ngcttgata aaggggagtt caaacagccc aagcagttca 300
tncatattca gccttttaac ctagacaacg agcaaccaga ttatgatatg gattcagaag 360
atgagacatt attaaataga cttaacagaa aaatggaaat taaacccttg caatttgaaa 420
ttatgattga cagacttgaa aaagccantt ctaccagctt gtacacttca agaagca 477

<210> 12

<211> 572
 <212> DNA
 <213> Mus musculus
 <220>
 <221> misc_feature
 <222> (505)..(572)
 <223> n can be any nucleotide

<400> 12
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 cttttcata aaatcattgg tgagcatttg tttactttc gggcaaggta tctgaatatg 180
 tctggcagtg attatgtcac attcattgca gtcctcctt gtattgcctt caaatccac 240
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 tagtctatac atcttgctc tatcaacttt ttgctttctaa gtgggtttat taaaacataa 420
 gctctttct gactgagaag cgggtgtctt ctttcttgc cggaggttagc tggccagtg 480
 attcaaggga tcaatggta ctcantctct ctaanctata tcataaggta tacttaatgc 540
 tggctttgg aagantaatt ctatctct gn 572

<210> 13
 <211> 579
 <212> DNA
 <213> Mus musculus
 <220>
 <221> misc_feature
 <222> (315)..(579)
 <223> n can be any nucleotide

<400> 13
 ctgctgtgag gaatgctggg attgttgttt ctgatgaagc tgcgcaggat gctgcctttg 60
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 tggatatgccc ttcttgctgg tggtaataa agctacggat gctgcagaaa ctctttact 180

gctcacagtc tgccctgggtt ttcttgaggt acattcttca ctatcaatgt cctgtacatt 240
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aagagacagt ctatnttcac aaggttact gggaaagcatt ggtccgagag aaattagaag 360
aaaatctata gtttgggaag acttgaaaac ccgttcagca tctcanggtc tatctgtttc 420
aggacggggt catgttctgt ggatatccgt ccattatgaa cctgccactc tgccattccc 480
ctccttgcaa tcctatacat cttcttgac tgtaatttcg taaganatgc ttatactcaa 540
cttattccat ctgccactct gaatttcnac atatggtan 579

<210> 14

<211> 403

<212> DNA

<213> *Mus musculus*

<220>

<221> misc_feature

<222> (400)..(400)

<223> n can be any nucleotide

<400> 14
ggaaagacaa agatgcagga tatagtactt ggaacaggct ttttaagtat tcatcctaaa 60
aatgaggctg agcacataga aaatggggct aagtgtccga atttggagtc cataaataag 120
gtaaatggtc tttgtgagga cactgcacccg tctcctggta gggttgaacc acagaaggcc 180
agttcttctg ctgacgtggg catttctaaa agcacggaag atctatctcc tcagagaagt 240
ggtccaaactg gagctgttgt gaaatctcat agtataacta acatggagac tggaggctta 300
aaaatctatg acattcttgg tcatgtatggc cctcagccgc caagttgcag cagttaaaat 360
cgcatctgct gtggatgggg aagaacatata cagaagcaan tct 403

<210> 15

<211> 555

<212> DNA

<213> *Mus musculus*

<220>

<221> misc_feature

<222> (382)..(555)

<223> n can be any nucleotide

<400> 15
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tattgtattc tatttgagcc aaggaaagg agaaccac tcaagtgaga taacaaactt 120
gctgtctttt acaaaaattta atcagaactg acaatgttat gtttagttct taattcctga 180
gaatttgaac atcattaagt tttctgtgaa tttacaacaa aacactcatg ttaatattta 240
aattacaata tttctgaaaa aatattgtta gcaaaagaaa accacatcca acgtatacag 300
taacccaggt gtgaacatac tgaagccctg ttgctcagca gtttaatacc atttaaatat 360
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gacatnattt ttntttttt ttaaanaatt attatctatt atatgtaagt acccggtanc 480
tgtcttcaac acccagaana aggggtccaa tctttacag aaggtgtgac cncatgtggn 540
gnccggaaatt nannn 555

<210> 16

<211> 562

<212> DNA

<213> *Mus musculus*

<220>

<221> misc_feature

<222> (430)..(561)

<223> n can be any nucleotide

<400> 16
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taatacagat cagtttccag ttcagaaccc taaatcacac ctacgtgagt gaggctgctg 180
cactgcttcc tttgggttct tcggccggcc agacagcctt tctgctttgt aagtgacttc 240
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aaagcgttan acctgatttt tattaaatat tatttcattc cctttccatg ccaagttcac 480

gttaacatct ttagaatact aaaacggaaa cccnccactt angaaacaac tgggaattgg 540
acatccacag gtacatcaca na 562
<210> 17
<211> 347
<212> DNA
<213> Mus musculus
<220>
<221> misc_feature
<222> (6)..(339)
<223> n can be any nucleotide
<400> 17
agcggnagtt tcagtctgcg ngacacgcgt ggnagccctt gcccgggcct ccgtgggtct 60
gaggcgctgc gagccctggg taaccacggc ctcgagctgc tgtcctcacc aagatcctcc 120
aattctgaac caagaacaaa aaaatgttcc agcttcgtgc atttcaaaga aggcatthaac 180
tagagcccag tttggcggac aagttcttca ttcaaaagag agtcctgtta ggatcactgt 240
gtccaaaaag aacacatttgc ttttggagg cattgattgt acttattgaa aagttttgaa 300
aatactgatg tttaacacca ttaagttctc tttgtgttnc ctaatta 347
<210> 18
<211> 569
<212> DNA
<213> Mus musculus
<220>
<221> misc_feature
<222> (156)..(565)
<223> n can be any nucleotide
<400> 18
cctcaatgtg tcgttagtact tgccccgcc agtcatgagg aaccttgctt tttcctggag 60
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ttctgcctcn caaatnttgg aaggncgca 569

<210> 19

<211> 338

<212> DNA

<213> *Mus musculus*

<220>

<221> misc_feature

<222> (42)..(321)

<223> n can be any nucleotide

<400> 19
gagacattct gaagggcagg aatgaggcgc tctccccagg gnagatggtg gtgaggctgc 60
tgagggggaa ggtgatatct ttccatcttc tcattacctg ccaatcacca aagaaggccc 120
tcgagacatt ctggatggca gaagtggcat ttctgtggct aacttcgacc cgggcacctt 180
tagcctgatg cgatgtgact tctgtgggc tggtttgat actcgggctg gcctctccag 240
tcatgccccg gcccaccttc gtgactttgg catcaccaac ttgggaaact ccaccatctc 300
accatcaaca tccttgcaaa naacttgctg gcccacct 338

<210> 20

<211> 483

<212> DNA

<213> *Mus musculus*

<220>

<221> misc_feature

<222> (318)..(481)

<223> n can be any nucleotide

<400> 20

ggagggtgta gcaaggcctg agaacatctt ccggggccgtg ggaggaggag aagcagttgg 60
tgagtggccc agaggactgc ctgggtgg tggcaacttc ttggtcaaag gtgagatgtg 120
aagatcagag ggacttcggg cttctagtga gctgccagga cctccagtgc tcagcacctt 180
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ccgtctcttc aggatctccc gaagtgtgtc gatgggtgag ccgttcacat accactcagt 300
tacacccatc tggcgcangt gggAACgtgc atggctanac aagcccttc tgttctcaaa 360
gaatcaccac anaactcaca gcggatatact cttgtggct ctgggcctga ancatctccg 420
tanattggcc canggtcctc accccantta ncgggaaag gcatggtnaa aagtaacctt 480
ngc 483

<210> 21

<211> 51

<212> PRT

<213> SBD mutant

<400> 21

Gln His Leu Gly Val Gly Met Glu Ala Pro Leu Leu Gly Phe Pro Thr
1 5 10 15

Met Asn Ser Asn Leu Ser Glu Val Gln Lys Val Leu Gln Ile Val Asp
20 25 30

Asn Thr Val Ser Arg Gln Lys Met Asp Cys Lys Thr Glu Asp Ile Ser
35 40 45

Lys Leu Lys
50

<210> 22

<211> 23

<212> DNA

<213> F3th12F (forward primer)

<400> 22

cggcggcaga tacgcctcct gca 23

<210> 23

<211> 29

<212> DNA

<213> th12 mouse1 (reverse primer)

<400> 23
caggagcagt tgtggtaga gccttcatc 29

<210> 24

<211> 31

<212> DNA

<213> th12

<400> 24
ctggactgag ctggacctgt ctctccagta c 31

<210> 25

<211> 30

<212> DNA

<213> th12

<400> 25
cacaagggag tatttcttgc gccacgaagg 30

<210> 26

<211> 20

<212> DNA

<213> th12

<400> 26
gccatggtgt gaggagaagc 20

<210> 27

<211> 19

<212> DNA

<213> Brachyury Binding Site

<400> 27
tgacacctag gtgtgaatt 19